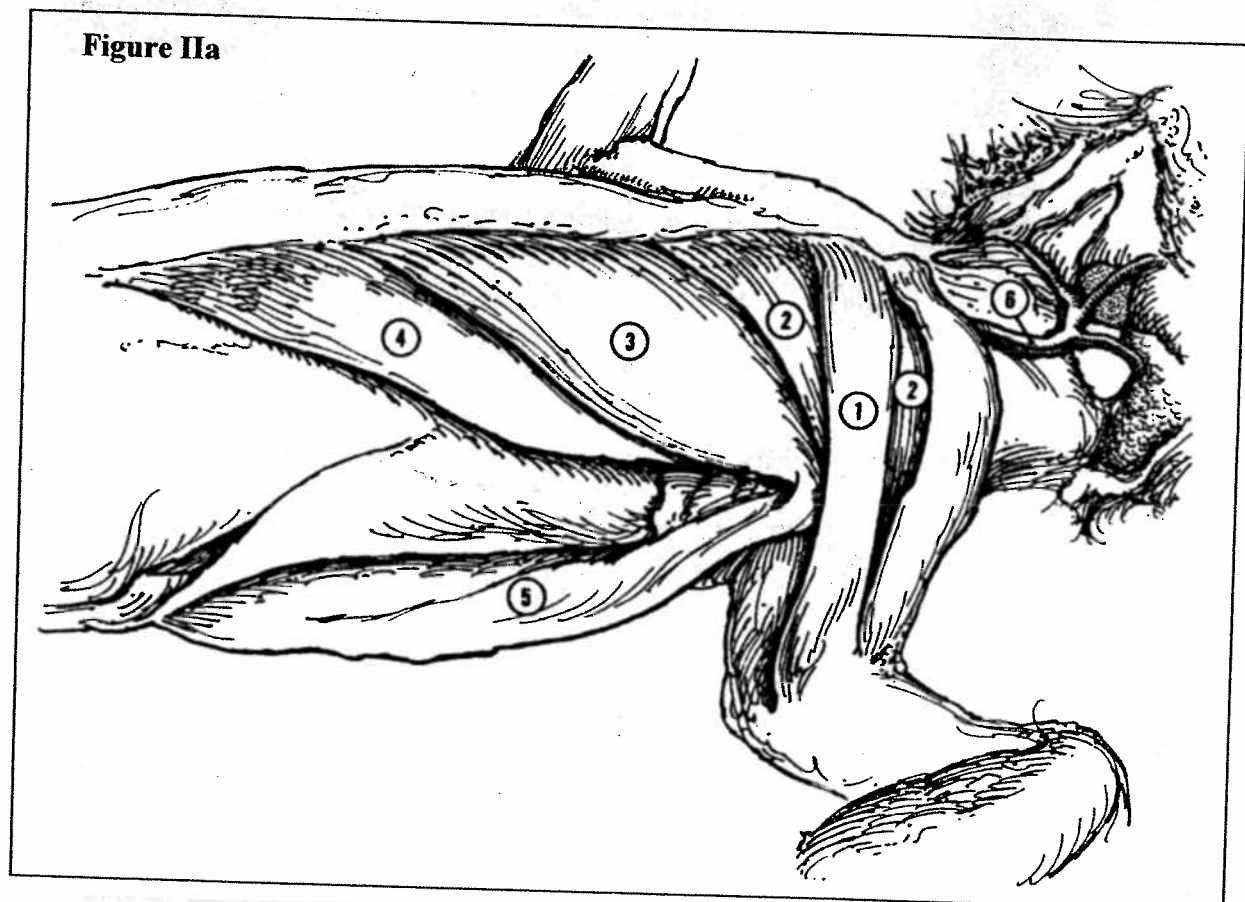
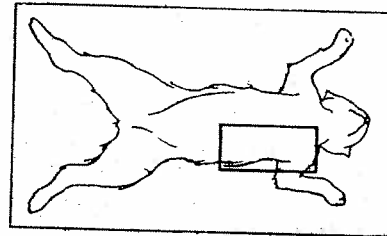


**Group II Muscles:**

pectoralis major  
pectoralis minor  
pectoantibrachialis  
xiphohumeralis  
serratus ventralis thoracis  
scalenus dorsalis  
scalenus medius  
scalenus ventralis  
transverse costarum  
external intercostal  
internal intercostal

**Muscle Identification**

- Figure IIa** Pectoral muscles
1. pectoantibrachialis
  2. pectoralis major
  3. pectoralis minor
  4. xiphohumeralis
  5. latissimus dorsi
  6. jugular vein and tributaries



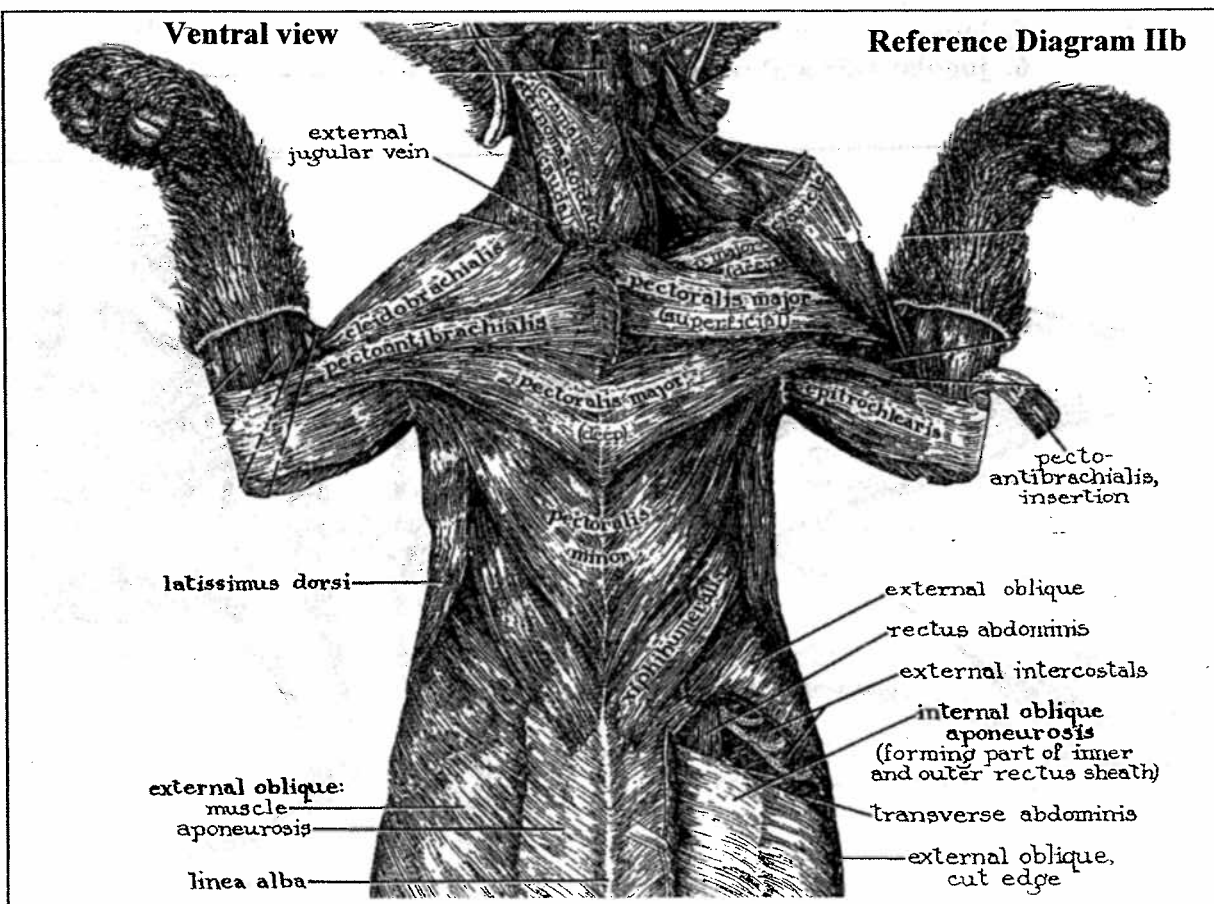
**INSTRUCTIONS FOR DISSECTION: FIGURE IIa**

Turn the cat on its back, as shown in **Figure IIa**, and find the general outline of the pectoral group of four muscles. Begin with the pectoantebrachialis, a long, thin, ribbonlike muscle. In most cats this is a difficult muscle to dissect because the fascia is tough. Be certain that you see its outlines before you begin, and do not dissect too deeply or you will damage the muscle beneath it. Separate the pectoantebrachialis between origin and insertion.

Next find the posterior border of the **pectoralis major** and loosen it at that point. This muscle is also thin, but it is much broader than the pectoantebrachialis, which overlies it (**Figure IIa**). With your finger or a probe loosen the pectoralis major from the underlying muscle, the **pectoralis minor**.

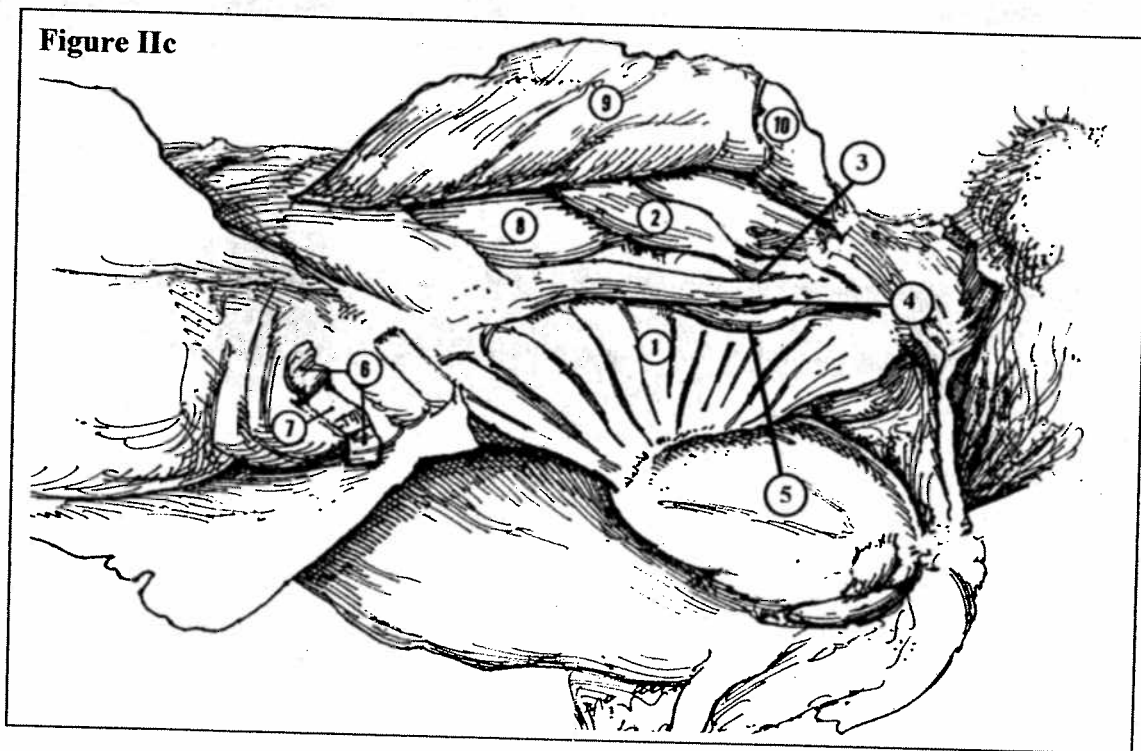
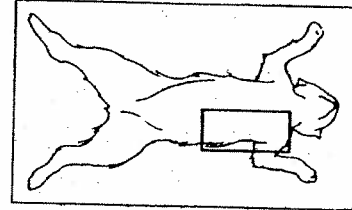
Now find the posterior border of the **pectoralis minor**. It is larger than the **pectoralis major** (despite its name) and runs beneath both the pectoralis major and the pectoantebrachialis. The pectoralis minor is the thickest muscle of this group as well as the broadest.

The last muscle of the group is the **xiphihumeralis**. Its origin is on the xiphoid process of the sternum on the midventral line. Its insertion on the humerus is a fragile tendon. Be careful not to tear this tendon. There are neither pectoantebrachialis nor xiphihumeralis muscles in the human.



**Muscle Identification****Figure IIc** Deep Chest Muscles

1. serratus ventralis thoracis
2. transverse costarum
3. scalenus ventralis
4. scalenus medius
5. scalenus dorsalis
6. external intercostal
7. internal intercostal
8. rectus abdominis
9. pectoralis minor (reflected)
10. pectoralis major (reflected)

**INSTRUCTIONS FOR DISSECTION: FIGURE IIc**

With the cat on its back (Figure IIc), transect the pectoral muscles—the pectoantebrachialis, the pectoralis major (which must be cut all the way to the humerus in order to reflect it), and finally the pectoralis minor. Do not transect the xiphohumeralis.

Observe once again the serratus ventralis, the subscapularis, and the teres major, as shown in Figure IIc. At the shoulder is a very small muscle, the *coracobrachialis*. It is no more than  $\frac{1}{2}$  inch long and tightly binds the scapula to the arm. (In the human it is much larger.)

Near the midline find a small oblique muscle, the *transversus costarum*, and lateral and somewhat above it, is the *scalenus*. The most prominent part of the three-part scalenus is the *scalenus medius*, which extends furthest posteriorly. On either side of the scalenus medius are shorter slips, the *scalenus anterior* and the *scalenus posterior*, but all three unite anteriorly. (The scalenus in the human is located higher in the neck region). Separate each slip. Note also in this area the anterior end of the rectus abdominis.

Clear a space between the ribs under the external oblique muscle of all fat and fascia. Between two adjacent ribs observe the *external intercostal* muscle, which has fibers that run obliquely from the posterior border of one rib to the anterior border of the next rib. Under the external intercostal lies the *internal intercostal*. Separate these two muscles, keeping in mind that they are very thin. The internal intercostal can be recognized because its fibers, also oblique, run at a different angle from those of the external intercostal.

